



Employment Loss as a Result of COVID-19: a Nationwide Survey at the Onset of COVID-19 in US LGBTQ+ Populations

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Abstract

Introduction The unemployment rate in the US reached record highs during the COVID-19 pandemic, but little is known about the job loss experiences of lesbian, gay, bisexual, transgender, and queer (LGBTQ+) individuals, who are already economically disadvantaged due to structural and social inequities.

Methods Cross-sectional data on unemployment due to COVID-19 were collected between May and July 2020 among 1090 individuals across the US through an online survey.

Results Respondents who had been employed prior to COVID-19 formed the analytic sample ($n = 990$). Of these, 298 (27.3%) reported job loss or being furloughed due to COVID-19. When controlling for all other factors, we found statistically significant higher rates of unemployment among younger participants, HIV-positive individuals, men, Black and White non-Hispanic participants, those with less educational attainment, and those in multi-person homes.

Conclusions The employment of LGBTQ+ people has been undermined by COVID-19, but as with all populations, those with multiple minority identities, such as Black or HIV+ and LGBTQ+, have been most severely affected.

Policy Implications LGBTQ+ populations in the US have experienced high levels of unemployment due to COVID-19. This study highlights the need for national data collection on sexual orientation and gender identity for unemployment as well as the need for substantive policies, such as expanding unemployment to assist in the economic recovery for populations most affected by COVID-19 and the Equality Act to offer further workplace protections.

Keywords COVID-19 · Unemployment · LGBTQ · Sexual and gender minority · Health equity

Introduction

Throughout the United States (US), the novel coronavirus (SARS-CoV-2) led to a further loss of human life and impacted the health and livelihoods of the population. In the US, there have been over 30 million cases, 546,000 deaths, and 30 million people filing for unemployment attributed

to the coronavirus disease (COVID-19) by February 2021 (Centers for Disease Control and Prevention, 2020a; US Department of Labor, 2020b). COVID-19 has disproportionately affected racial and ethnic minority populations (Abuelgasim et al., 2020; Chen et al., 2021; Laurencin & McClinton, 2020; Rossen et al., 2020), immigrant populations (Clark et al., 2020), and individuals without insurance and underinsured (Rader et al., 2020) and stable housing (Ahmad et al., 2020). The COVID-19 pandemic has exacerbated inequalities throughout the US, including economic inequalities as seen through job loss.

The US unemployment rate dramatically increased due to COVID-19, while those who were employed in food, transportation, and retail sectors experienced higher excess mortality, especially for workers in racial and ethnic minority groups (Chen et al., 2021). As of December 2020, the US unemployment rate was 6.2% or about 8% lower than the start of COVID-19 in April 2020, which was the

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highest unemployment rate since the Great Depression (Fairlie et al., 2020; US Department of Labor, 2020b). The US Household Pulse Survey in March 2021 found 31% of adults surveyed had a high likelihood of eviction or foreclosure and 19% of adults expected someone in the household to have a loss of income in the next four weeks (US Census Bureau, 2021a). The US federal government passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act in March 2020 to provide financial relief for small businesses, unemployed persons, and those with student loans (US Department of Treasury, 2020). Before the Consolidated Appropriates Act, 2021, which included COVID-19 stimulus relief, was signed into law on December 27, 2020 (The Associated Press, 2020; US Congress, 2021), an estimated 12 million people would have lost unemployment benefits (Stettner & Pancotta, 2020) and 6.7 million households faced possible eviction (Threet et al., 2020). Further support from the US government with the American Rescue Plan includes direct economic relief, funding to reopen schools, and funding for community vaccination efforts (The White House, 2021; US Department of Treasury, 2021). Targeted policies to support those most affected by COVID-19 are needed for long-term economic recovery.

Information on jobs loss and financial strain due to the COVID-19 pandemic among lesbian, gay, bisexual, transgender, and queer (LGBTQ+) populations within the US is limited. Sexual orientation and gender identity (SOGI) data are not regularly collected for national COVID-19 reports and previous national surveys reported LGBTQ+ household data, which can miss a large part of the LGBTQ+ population (Jones, 2017; Krause, 2021; Mirza et al., 2018; Movement Advancement Project, 2020). The lack of SOGI data is concerning given that sexual and gender minorities (SGM) often experience higher rates of adverse health outcomes, such as barriers to healthcare (Griffin et al., 2018, 2020a; Heck et al., 2006), homelessness (Castellanos, 2016; Ecker et al., 2019; Krause et al., 2016), mental health burdens (Russell & Fish, 2016; Su et al., 2016), and intimate partner violence (Walters et al., 2011). The economic disparities between SGM and non-SGM populations have existed before the COVID-19 pandemic (Carpenter et al., 2020; Charlton et al., 2018; The Williams Institute, 2019), and these disparities may continue to worsen during the pandemic as SGM in the US have experienced a greater risk of job loss and economic uncertainty compared to the non-SGM population, especially for Black LGBTQ+ households (Human Rights Campaign Foundation & PSB, 2020; Movement Advancement Project, 2020; Whittington et al., 2020). This study aims to describe job loss among the LGBTQ+ population within the US and identify demographic differences in job loss among this diverse LGBTQ+ population.

Methods

This cross-sectional study examined experiences due to COVID-19 among LGBTQ+ individuals in the US through an internet-based survey from May 2020 through July 2020. Study design and recruitment strategies have been previously described in more detail (Martino et al., 2021). To summarize, eligibility criteria included participants who were 18 years or older, identified LGBTQ+, and lived in the US, including the US territories. The survey was only available in English. The survey was conducted through Qualtrics (Qualtrics, 2005) with participants recruited online through listservs of academic and professional organizations, such as American Psychological Association, and through social media LGBTQ+ groups and social media posts by accounts of the research center and research staff. Data collection occurred in two waves, Wave I (May 7–8, 2020) and Wave II (June 11 to July 31, 2020) due to the detection of bots attempting to claim gift cards in Wave I. Responses flagged as bots by Google reCaptcha (Google, 2020) or had inconsistencies, such as duplicate responses for qualitative questions, were removed from the study sample. Further detail on bot removal has been described previously (Griffin et al., 2021). Eligible participants were offered a \$5 electronic gift card in Wave I and the chance to win one of ten \$100 gift cards in a raffle for Wave II. To protect against bots in Wave II, we implemented IP address checks and repeated questions to check for consistency. All study activities were approved by the Institutional Review Board at Rutgers University (#Pro2020000920).

Study Population and Measures

The total sample of study participants was 1090 LGBTQ+ participants. Wave I had 477 participants, while Wave II had 613 participants with no demographic (i.e., race/ethnicity, gender identity, sexual orientation) differences between both groups. Participants self-reported all data including demographic characteristics and employment data. We used March 13, 2020, as the onset of the pandemic.

For demographic characteristics, participants reported their sex assigned at birth, gender identity, sexual orientation, age, and race/ethnicity. Sexual orientation and gender identity were collapsed into one variable to analyze the nuanced interaction between the two demographic characteristics. For the analyses, participants who reported their sexual orientation as bisexual or other were collapsed into one group for each gender identity due to the small sample sizes. Participants were asked their nation of birth, which we dichotomized as born outside the US and US born,

HIV status, and education attainment, which we collapsed into high school/GED or less, some college or associate's degree, and bachelor's degree or graduate degree. We collected the number of people living in the household and the US Postal Service ZIP codes of current residence, which we matched to US states and territories to create six US regions (Northeast, Midwest, Mountain, Pacific, South, and Non-Contiguous U.S regions) (Florida, 2019; Jean, 1957).

Participants were asked their employment status and a series of questions depending on whether they were employed or unemployed. Those who were employed were asked to report if they were self-employed, worked from home before and after March 13, 2020, and if they were essential workers. Participants who were unemployed were asked if they lost their job as a result of the coronavirus. All participants were asked if they were furloughed from their job as a result of coronavirus.

Statistical Analyses

Descriptive statistics were reported for all variables. Participants who reported either job loss or furloughed from their job due to COVID-19 were grouped into the unemployment due to COVID-19, while those who reported full-time employment or part-time employment were grouped into the employed group. To get a clear understanding of the differences of employment due to COVID-19, the 100 participants who reported unemployment both before and after the COVID-19 pandemic were excluded from the analyses. We analyzed differences in demographic characteristics between participants who were employed and unemployed due to COVID-19 with chi-squared tests. We then conducted logistic regression analyses to better understand the outcome of unemployment due to COVID-19. An alpha level of 0.05 was used to assess significance, and all analyses were conducted with SAS 9.4 (TS1M5) (SAS Institute Inc, 2016).

Results

Overall, 1090 study participants across the US completed the survey (Table 1). Ages ranged from 18 to 81 years (median 30, mean 33.88, standard deviation 11.85) and a majority of participants identified as White non-Hispanic (69%), followed by Black non-Hispanic (11%), and Hispanic/Latinx (10%). In terms of gender and sexual orientation, the study drew upon a diverse sample. A majority of participants had completed a bachelor's degree or more education (71%) and reported being HIV-negative (79%). For relationship status, participants reported an even distribution between single, in a committed relationship, and married or in a domestic partnership. Most participants (83%) reported that their current living situation was the same as before the start of the

pandemic and 12% of participants reported living alone. A large majority of participants were born in the US (93%), and there was a diverse distribution of current place of residence by US region.

Of the 1090 participants, 215 (20%) participants were unemployed, and among those who were unemployed, 109 (51%) reported that they lost their job as a result of the coronavirus. Of the 1090 participants, 246 (22.6%) participants were furloughed from their job due to COVID-19, while 875 (80%) participants reported some type of employment. Of the 875 employed participants, 136 (16%) were self-employed and 642 (73%) were currently working from home.

To better understand differences in economic loss among the population, participants who reported either job loss or furlough due to COVID-19 were considered unemployed due to COVID-19 ($n = 298$) were compared to those who reported current employment ($n = 692$) (Table 2). Job loss differed across all sociodemographic variables, except for nation of birth and change in current living situation. Those in younger age groups reported high frequencies of unemployment due to COVID-19 ($\chi^2 = 62.05$, $df = 3$, $p < .001$) with job loss reported by 42% of participants in the 18–29 age group and 24% participants in the 30–39 age groups. Among racial/ethnic groups, job loss within Native American/Other and Black non-Hispanic groups were highest with 45% and 43%, respectively ($\chi^2 = 20.66$, $df = 5$, $p < .001$). Furthermore, there were significant differences in job loss among sexual orientation and gender ($\chi^2 = 35.98$, $df = 9$, $p < .001$). Participants were more likely to report being employed if they had at least a bachelor's degree (81%; $\chi^2 = 134.97$, $df = 2$, $p < .001$), were not currently enrolled in school (72%, $\chi^2 = 7.04$, $df = 1$, $p < .001$), were employed full time (83%, $\chi^2 = 30.82$, $df = 1$, $p < .001$), were living in the Northeast (79%; $\chi^2 = 35.57$, $df = 5$, $p < .001$), and were HIV-negative (75%; $\chi^2 = 38.12$, $df = 2$, $p < .001$). In addition, 54% of those living with 4–5 other people and 39% of these living with 2–3 other people reported job loss due to COVID-19 ($\chi^2 = 85.44$, $df = 4$, $p < .001$).

Logistic regression analyses were conducted to model unemployment due to COVID-19 (Table 3). Unadjusted odds ratios (OR) and adjusted odds ratio (aOR) were reported for the sociodemographic variables that were significant in the chi-square analyses (Table 2). The adjusted model was statistically significant ($\chi^2 = 243$, $df = 33$, $p < .001$, classification fit = 86%). The younger participants in the 18–29 and 30–39 age groups indicated 6.78 and 2.95 times the odds of unemployment due to COVID-19, respectively, compared to the 50+ age group. Compared to Hispanic/Latinx participants, Black non-Hispanic and White non-Hispanic participants reported higher rates of job loss. Gay cisgender and transgender men indicated 2.25 and 5.74 times the odds of job loss compared to bisexual and other sexual orientation women, respectively. Participants with a high school education or less indicated 2.63

Table 1 Demographic and employment characteristics during the COVID-19 pandemic, *n* = 1090, 2020, USA

	<i>n</i>	%
Age		
18–29	497	45.6
30–39	347	31.8
40–49	110	10.1
50+	136	12.5
Race and ethnicity		
Asian/Pacific Islander non-Hispanic	47	4.3
Black non-Hispanic	121	11.1
Hispanic/Latinx	104	9.5
Multiracial	43	3.9
Native American/Other	23	2.1
White non-Hispanic	752	69.0
Sexual orientation and gender identity		
Gay cis men	397	36.4
Bi cis men	73	6.7
Other sexual orientation cis men	9	0.8
Lesbian cis women	190	17.4
Bi cis women	168	15.4
Other sexual orientation cis women	42	3.9
Gay trans men	16	1.5
Bi trans men	16	1.5
Other sexual orientation trans men	17	1.6
Lesbian trans women	12	1.1
Bi trans women	15	1.4
Other sexual orientation trans women	10	0.9
Gay/Lesbian non-binary	32	2.9
Bi non-binary	50	4.6
Other sexual orientation non-binary	43	3.9
Educational attainment		
High school/GED or less	73	6.7
Some college/Associates degree	243	22.3
Bachelor's degree or more	774	71.0
Education status		
Currently enrolled in school	309	28.5
Not currently enrolled in school	775	71.5
HIV status		
Positive	99	9.1
Negative	866	79.4
Unknown	122	11.2
Relationship status		
Single	325	29.8
In a committed relationship	434	39.8
Married or domestic partnership	296	27.2
Separated, widowed, or divorced	35	3.2
Nation of birth		
Outside USA	74	6.8
USA	1012	92.8
US region		
Northeast	420	38.5
Midwest	130	11.9
South	219	20.1

Table 1 (continued)

	<i>n</i>	%
Mountain	104	9.5
Pacific	177	16.2
Non-contiguous	30	2.8
Number of people living with participant		
Lives alone	133	12.3
1	364	33.6
2–3	450	41.5
4–5	112	10.3
6+	26	2.4
Employment		
Unemployed	215	19.7
Employed, full time	643	59
Employed, part time	232	21.3
Self-employed (<i>n</i> = 875)		
No	739	84.5
Yes	136	15.5
Worked from home before March 13, 2020 (<i>n</i> = 875)		
No	711	81.3
Yes	164	18.7
Currently work from home (<i>n</i> = 875)		
No	233	26.6
Yes	642	73.4
Essential workers (<i>n</i> = 874)		
No	604	69.1
Yes	270	30.9
Job loss as a result of the coronavirus (COVID-19) (<i>n</i> = 215)		
No	106	49.3
Yes	109	50.7
Furloughed from job as a result of the coronavirus (COVID-19)		
No	844	77.4
Yes	246	22.6

times the odds and participants with some college or an associate's degree indicated 3.37 times the odds of job loss compared to participants with a bachelor's degree or more education. Participants who reported being HIV-positive indicated 2.39 times the odds of job loss compared to participants who reported being HIV-negative. Participants who reported living with 2–3 other people and with 4–5 other people indicated 6.04 times the odds and 10.28 times the odds of job loss, respectively, compared to participants that reported living alone. Differences in job loss by US regions, current education status, and employment type were not statistically significant.

Discussion

The cross-sectional study of COVID-19 experiences among LGBTQ+ individuals in the US found that the population experienced high rates of job loss. We found

that participants who experienced greater job loss within the LGBTQ+ population were younger in age, Black non-Hispanic and White non-Hispanic, gay cisgender men, individuals with an associate's degree or high school education, HIV-positive, and living with 2–5 other people. Among the 1090 surveyed, 298 (27.3%) reported job loss due to COVID-19 compared to the national average of 13.3% in May 2020 (US Department of Labor, 2020a). Previously LGBTQ+ households reported higher rates of financial problems and job loss compared to non-LGBTQ+ households (Movement Advancement Project, 2020). We have conducted one of the first studies to report job loss within the US LGBTQ+ population during the COVID-19 pandemic to better understand the nuanced experiences of individuals within the LGBTQ+ community.

We found that younger LGBTQ+ individuals were more likely to report unemployment due to COVID-19 when controlling for all other characteristics. Younger individuals

Table 2 Job loss due to COVID-19 by demographic characteristics, insurance, and living arrangement, $n = 990$, 2020, USA

	Employed $n = 692$		Unemployed due to COVID-19 $n = 298$		p
	n	% ^a	n	% ^a	
Age					<.001
18–29	255	58.0	185	42.1	
30–39	255	75.4	83	24.6	
40–49	85	81.7	19	18.3	
50+	97	89.8	11	10.2	
Race and ethnicity					<.001
Asian/Pacific Islander non-Hispanic	29	69.1	13	31.0	
Black non-Hispanic	66	57.4	49	42.6	
Hispanic/Latinx	74	79.6	19	20.4	
Multiracial	30	88.2	4	11.8	
Native American/Other	12	54.6	10	45.5	
White non-Hispanic	481	70.3	203	29.7	
Sexual orientation and gender identity					<.001
Gay cis men	239	64.6	131	35.4	
Bi/Other sexual orientation cis men	53	69.7	23	30.3	
Lesbian cis women	117	66.5	59	33.5	
Bi/Other sexual orientation cis women	146	78.1	41	21.9	
Gay trans men	6	37.5	10	62.5	
Bi/Other sexual orientation trans men	23	85.2	4	14.8	
Lesbian trans women	5	50.0	5	50.0	
Bi/Other sexual orientation trans women	15	68.2	7	31.8	
Gay/Lesbian non-binary	20	74.1	7	25.9	
Bi/Other sexual orientation non-binary	68	86.1	11	13.9	
Education attainment					<.001
High school/GED or less	28	41.2	40	58.8	
Some college/Associates degree	91	43.3	119	56.7	
Bachelor's degree or more	573	80.5	139	19.5	
Education status					0.008
Currently enrolled in school	167	63.5	96	36.5	
Not currently enrolled in school	521	72.3	200	27.7	
Worked from home before March 13, 2020					<.001
Yes	106	64.6	58	35.4	
No	586	82.4	125	17.6	
Employment type					<.001
Part time employment	154	66.4	78	33.6	
Full time employment	538	83.7	105	16.3	
US region					<.001
Northeast	305	78.6	83	21.4	
Midwest	80	69.6	35	30.4	
South	135	67.5	65	32.5	
Mountain	58	62.4	35	37.6	
Pacific	94	59.9	63	40.1	
Non-contiguous	12	41.4	17	58.6	
Nation of birth					0.59
Outside USA	48	72.7	18	27.3	
USA	640	69.6	280	30.4	
HIV status					<.001

Table 2 (continued)

	Employed <i>n</i> = 692		Unemployed due to COVID-19 <i>n</i> = 298		<i>p</i>
	<i>n</i>	% ^a	<i>n</i>	% ^a	
Negative	584	74.5	200	25.5	
Positive	48	53.3	42	46.7	
Unknown	58	51.3	55	48.7	
Number of people living with participant					<.001
Lives alone	107	89.2	13	10.8	
1 other person	265	81.3	61	18.7	
2–3 other people	253	61.1	161	38.9	
4–5 other people	47	45.6	56	54.4	
6+ other people	17	73.9	6	26.1	

^aRow percent

In cases when sample size of cell was insufficient, Fisher Exact Test was utilized

are possibly at an increased risk of job loss due to job type (Human Rights Campaign Foundation & PSB, 2020; Kochhar & Barroso, 2020). These findings are concerning given the lack of financial savings younger individuals have overall (Mottola, 2014), and the reduction in savings has been amplified due to the COVID-19 pandemic (Dickler, 2020; Royal, 2020). Job loss among younger adults due to COVID-19 has been associated with mental health burdens (Ganson et al., 2021). Our findings build off previous research and indicate that younger LGBTQ+ individuals are currently experiencing major financial insecurities due to unemployment.

Additionally, gay men reported greater job loss compared to cisgender women who identified as bisexual or another sexual orientation. These results are particularly salient because national unemployment surveys typically do not include unemployment data by SOGI on the individual level and are therefore lacking this important information during the COVID-19 pandemic (Krause, 2021). A previous study from the Williams Institute found that LGBTQ+ individuals experienced higher rates of poverty than cisgender; heterosexual individuals and that experience of unemployment for LGBTQ+ are complex and differ by specific SOGI groups (Badgett et al., 2019). Through the Household Pulse Survey, the US Census Bureau has published for the first time in July 2021 the employment experiences of LGBTQ+ households with 23% of LGBTQ+ households and 32% of transgender households experiencing loss of employment income within the last 4 weeks (US Census Bureau, 2021b).

Furthermore, we found that Black and White non-Hispanic participants reported greater job loss than Hispanic/Latinx participants. Certain racial/ethnic minority individuals are working more essential, frontline jobs, which has led to the high rates of infection and death within these populations (Cahill et al., 2020; Chen et al., 2021; Hsu et al., 2020), especially for

Hispanic/Latinx populations throughout the US (Rodriguez-Diaz et al., 2020; Vahidy et al., 2020). Participants with higher educational attainment were protected from job loss, which is consistent with the general US population (Centers for Disease Control and Prevention, 2020b).

It is concerning to report that people living with HIV are experiencing greater rates of job loss compared to participants who reported an HIV-negative status. People living with HIV are experiencing delays or interruptions in care (Sanchez et al., 2020; Santos et al., 2020), and multiple physical, psychosocial, and structural health burdens due to the COVID-19 (Shiau et al., 2020). With the increase in unemployment, LGBTQ+ individuals face the possibility of losing their health insurance leading to gaps in care (Griffin-Tomas et al., 2018; Griffin et al., 2020b; Mojtabai, 2019). While the CARES Act covers COVID-19-related care (US Department of Health & Human Services, 2020), those who need medical attention may delay or not seek care due to perceived cost of care (Farmer, 2020), particularly when there have been reports that people have received surprise healthcare bills when seeking COVID-19 testing and care (CBS News, 2020; Rodriguez, 2020). The healthcare seeking behaviors of LGBTQ+ individuals are complex and may change as healthcare policies change throughout the COVID-19 pandemic. Previously, LGBTQ+ individuals were less likely to avoid care if they had insurance (Griffin-Tomas et al., 2018); however, they were more likely to have individually purchased insurance and avoid healthcare due to costs compared to heterosexual individuals (Nguyen et al., 2018). During the COVID-19 pandemic, families with privately purchased insurance and underinsured individuals were more likely to avoid care due to cost highlighting the need for expanding Medicaid coverage for individuals who fall into eligibility gaps or are under uninsured (Collins et al., 2020; Foster, 2020; Garfield et al., 2021; King, 2020).

Table 3 Logistic regression models evaluating unemployment due to COVID-19 for LGBTQ+ COVID-19 survey participants, 2020, USA (*n* = 990)

	OR	95% CI	<i>p</i>	aOR ^a	95% CI	<i>p</i>
Age						
18–29	6.40	(3.33, 12.28)	<.001	7.43	(2.96, 21.79)	<.001
30–39	2.87	(1.47, 5.61)	0.002	2.97	(1.17, 8.74)	0.032
40–49	1.97	(0.89, 4.38)	0.1	2.49	(0.73, 8.81)	0.1445
50+	Ref			Ref		
Race and ethnicity						
Asian/Pacific Islander non-Hispanic	1.75	(0.76, 3.99)	0.19	2.54	(0.59, 10.39)	0.20
Black non-Hispanic	2.89	(1.55, 5.40)	<.001	5.57	(2.10, 16.13)	<.001
Multiracial	0.52	(0.16, 1.66)	0.27	0.95	(0.18, 2.72)	0.96
Native American/Other	3.25	(1.22, 8.64)	0.018	4.58	(0.77, 25.01)	0.083
White non-Hispanic	1.64	(0.97, 2.79)	0.066	5.04	(2.13, 13.42)	<.001
Hispanic/Latinx	Ref			Ref		
Sexual orientation and gender identity						
Gay cis men	1.95	(1.30, 2.93)	0.001	2.25	(1.23, 4.19)	0.010
Bi/Other sexual orientation cis men	1.55	(0.85, 2.82)	0.15	1.39	(0.62, 3.06)	0.42
Lesbian cis women	1.80	(1.13, 2.86)	0.014	1.18	(0.59, 2.37)	0.63
Gay trans men	5.94	(2.04, 17.30)	0.001	5.74	(1.20, 28.99)	0.029
Bi/Other sexual orientation trans men	0.62	(0.20, 1.89)	0.40	0.54	(0.07, 2.44)	0.48
Lesbian trans women	3.56	(0.98, 12.90)	0.053	0.34	(0.01, 4.94)	0.46
Bi/Other sexual orientation trans women	1.66	(0.64, 4.35)	0.30	0.89	(0.19, 3.58)	0.87
Gay/Lesbian non-binary	1.25	(0.49, 3.15)	0.64	0.38	(0.05, 1.77)	0.26
Bi/Other sexual orientation non-binary	0.58	(0.28, 1.19)	0.14	0.43	(0.13, 1.20)	0.13
Bi/Other sexual orientation cis women	Ref					
Education attainment						
High school/GED/trade school or less	5.89	(3.51, 9.88)	<.001	2.63	(1.23, 5.66)	0.013
Some college/associates degree	5.39	(3.88, 7.50)	<.001	3.37	(2.06, 5.53)	<.001
Bachelor's degree (4-year college) or more	Ref			Ref		
Education status						
Currently enrolled in school	1.50	(1.11, 2.02)	0.008	1.00	(0.62, 1.60)	0.99
Not currently enrolled in school	Ref			Ref		
Worked from home before March 13, 2020						
Yes	2.57	(1.76, 3.72)	<.001	1.50	(0.90, 2.45)	0.11
No	Ref			Ref		
Employment type						
Part time employment	2.60	(1.84, 3.66)	<.001	1.52	(0.95, 2.43)	0.080
Full time employment	Ref			Ref		
US region						
Midwest	1.61	(1.01, 2.56)	0.08	1.10	(0.54, 2.18)	0.79
Mountain	2.22	(1.37, 3.60)	0.050	1.73	(0.81, 3.60)	0.15
Non-contiguous	5.21	(2.39, 11.33)	0.001	2.11	(0.67, 6.85)	0.21
Pacific	2.46	(1.65, 3.68)	<.001	1.45	(0.77, 2.68)	0.24
South	1.77	(1.21, 2.59)	<.001	1.36	(0.76, 2.41)	0.30
Northeast	Ref			Ref		
HIV status						
Positive	2.56	(1.64, 3.98)	<.001	2.39	(1.18, 4.86)	0.015
Unknown	2.77	(1.85, 4.14)	<.001	1.99	(1.11, 3.55)	0.020
Negative	Ref			Ref		
Number of people living with participant						
1 other person	1.89	(1.00, 3.59)	0.05	1.56	(0.59, 4.94)	0.40
2–3 other people	5.23	(2.85, 9.62)	<.001	6.04	(2.47, 18.25)	<.001
4–5 other people	9.8	(4.90, 19.62)	<.001	10.28	(3.75, 33.61)	<.001

Table 3 (continued)

	OR	95% CI	<i>p</i>	aOR ^a	95% CI	<i>p</i>
6+ other people	2.9	(0.97, 8.67)	0.06	2.47	(0.41, 12.91)	0.29
Lives alone	Ref			Ref		

^aSample size for the adjusted model was 854 due to missing data

Strengths and Limitations

Our study has several strengths worth noting. This study is one of few to report unemployment and job loss for LGBTQ+ individuals instead of LGBTQ+ households, which do not fully represent the LGBTQ+ population (Lee et al., 2020). Additionally, this study draws on a large sample of LGBTQ+ individuals throughout the US and US territories. However, this study is not without limitations. First, a majority of our sample was white non-Hispanic and our recruitment method of internet-based groups may have resulted in sampling bias of participants, include those who could read and understand English and had the capability to use an internet-based survey. Second, because we did not collect job type or income for all participants, we cannot analyze differences in job loss by occupation type or income levels. Furthermore, unemployment has changed and will continue to change since the collection of data. However, we believe that recovery from job loss during the start of the pandemic will take time along with targeted interventions to individuals who are most vulnerable.

Conclusions

Our findings indicate that LGBTQ+ individuals experience a high rate of underemployment or unemployment due to COVID-19. This financial hardship exacerbates a public health crisis as it leads to further health and economic burdens, such as food insecurity (Mehta & Chang, 2020), evictions (Riley et al., 2020), and loss of health insurance (Woolhandler & Himmelstein, 2020). With about 31% of adults having a high likelihood of eviction or foreclosure (US Census Bureau, 2021a), LGBTQ+ individuals are especially vulnerable to eviction due to unemployment. US states that have lifted eviction moratoriums have seen an increase in COVID-19 cases and deaths compared to states that have not lifted the moratoriums (Leifheit et al., 2020). The LGBTQ+ population is not monolithic, and our analyses indicate greater economic vulnerabilities among certain subgroups suggesting that tailored approaches must be used to address the economic health in a population that is already economically underserved (Carpenter et al., 2020; Charlton et al., 2018; The Williams Institute, 2019). While our study provides critical knowledge, there is an ongoing need to advocate for the inclusion of SOGI demographic items in the US census and other large scale national data collection to

accurately capture data with regard to the extent of the well-being of the population (Krause, 2021). Such data will also help provide support for the allocation of funding to support the health and wellbeing of LGBTQ+ individuals and populations (King, 2020; Sheckter et al., 2020). These structural changes are essential if we are to effectively understand the needs of LGBTQ+ populations which continue to experience marginalization and discrimination placing sexual and gender minority individuals at risk for underemployment and unemployment, and health inequity.

Author Contribution All authors have equally contributed to this article.

Availability of Data and Material Data are available upon request to the corresponding author.

Code Availability Code is available upon request to the corresponding author.

Declarations

All study activities were approved by the Institutional Review Board at Rutgers University. (#Pro2020000920).

Conflict of Interest The authors declare no competing interests.

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